

What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. A method of updating an encryption key in a wireless network, said method comprising:

5 separating a communication device containing an encryption key from a wireless station of said network;

connecting said removed communications device to a wired portion of said network which contains an encryption key generator;

10 replacing an existing encryption key in said communications device with a new encryption key from said generator using a communication over said wired portion of said network; and

reconnecting said communications device containing said new encryption key with wireless station of said network.

15 2. A method as in claim 1, wherein said new encryption key is generated at user-defined intervals.

3. A method as in claim 1, wherein said new encryption key is generated on user-specified days.

4. A method as in claim 1, wherein said key generator generates a first new encryption key;

20 compares said new encryption key to the previous ~~4~~ encryption keys used in said network; and

generates a second new encryption key if said first new encryption key matches any of said ℓ previously used encryption keys.

5. A method as in claim 5, wherein ℓ is a user-defined number of previously used encryption keys.

5 6. A method as in claim 1, wherein said network communication device is configured on a plug-in card and is connected to said network by inserting said network communications device into a card tray.

7. A method as in claim 6, wherein a plurality of network communications devices can be inserted into said card tray simultaneously.

10 8. A wireless network comprising:

a wired station connected to a wired network, said wired station comprising:

an encryption key generator for generating an encryption key; and

a wired network communications device for transmitting said encryption key over said wired network;

15 a wireless station wirelessly connected to said wired network, said wireless station comprising:

a wireless network communications device containing an encryption key, said wireless network communications device being disconnectable from said wireless station and connectable to said wired network to receive and store as a new encryption key, an encryption key transmitted over said wired network by said wired network communications device.

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9. A wireless network as in claim 8, wherein said new encryption key is a randomly generated encryption key

10. A wireless network as in claim 8, wherein said new encryption key is generated by said generator and transmitted by said wired network communications device at user-defined intervals.

11. A wireless network as in claim 8, wherein when a newly generated encryption key is the same as one of k previously used encryption keys, said encryption key generator generates a new encryption key.

12. A wireless network as in claim 11, wherein k is a user-defined number.

13. A wireless network as in claim 8, further comprising a plurality of access points.

14. A wireless network as in claim 8, further comprising a card tray connected to said wired network, said wireless network communications device being connected to said wired network by insertion of said wireless network communications device into said card tray.

15. A wireless network wireless station comprising:

a wireless network communications device for conducting wireless communications with a wired network, said wireless network communications device being removable from said station and storing an updateable encryption key used in conducting encrypted wireless communications, said removable wireless network

communications device being connectable to a wired network to receive and store a new encryption key.

16. A wireless station as in claim 15, wherein said wireless network communications device is adapted to be connected to a wired network by being insertable into a card tray connected to said wired network.

17. A wireless network communications device comprising:
a removable wireless communications network card adapted to be connected to and disconnected from a wireless station card interface;

a storage area said network card which stores an updateable encryption key for use in conducting encrypted wireless network communications, said encryption key being updateable when said card is connected to a wired network card interface which supplies a new encryption key.

18. A wireless network communications card as in claim 17, wherein said card interface for providing a new encryption key is a PCMCIA card interface.

19. A wireless network communications card as in claim 18, wherein said PCMCIA card interface is provided at a PCMCIA card tray.

20. An encryption key programming system comprising:
an encryption key generator connected to a wired network;
a programming device connected to said wired network for receiving over a wire connection an encryption key from said generator, said programming device

being adapted to receive a wireless network communications device and storing said received encryption key in said wireless network communications device.

21. An encryption key programming system as in claim 20, wherein said encryption key generator generates a random encryption key.

5 22. An encryption key programming system as in claim 20, wherein said encryption key generator generates a new encryption key at user-defined intervals.

23. An encryption key programming system as in claim 20, wherein said encryption key generator generates a new encryption key on user-specified days.
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24. An encryption key programming system as in claim 20, wherein said encryption key generator generates a first new encryption key, compares said new encryption key to the previous ϵ encryption keys used in said network and generates a second new encryption key if said first new encryption key matches any of said ϵ previously used encryption keys;
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25. An encryption key programming system as in claim 20, wherein ϵ is a user-defined number of previously used encryption keys.

26. An encryption key programming system as in claim 20, further comprising a card tray connected to said programming device, said wireless communications device being received by said programming device by
20 insertion of said wireless communications device into said card tray.